

EXHIBIT 65

Zillow Infringes U.S. Patent No. 8,315,904 (Black)

U.S. Patent 8,315,904 (Black) - Overview

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(12) United States Patent Black et al.	(10) Patent No.: US 8,315,904 B2 (45) Date of Patent: Nov. 20, 2012
(54) ORGANIZATION FOR PROMOTION MANAGEMENT	6,067,525 A 5/2000 Johnson et al. 6,076,068 A 6/2000 DeLapa et al. 6,078,892 A 6/2000 Anderson et al. 6,097,792 A 8/2000 Thornton 6,134,530 A 10/2000 Bunting et al. 6,160,549 A 12/2000 Touma et al. 6,161,103 A 12/2000 Rauer et al. 6,263,334 B1 7/2001 Fayyad et al. 6,321,241 B1 11/2001 Gartung et al. 6,493,708 B1 12/2002 Ziauddin et al. 6,539,232 B2 3/2003 Hendrey et al. 6,567,786 B1 5/2003 Bibelnieks et al. 6,606,621 B2 8/2003 Hopeman et al. 6,684,207 B1 1/2004 Greenfield et al. 6,691,120 B1 2/2004 Durrant et al. 6,694,316 B1 2/2004 Langseth et al. 6,782,390 B2 8/2004 Lee et al. 6,847,934 B1 1/2005 Lin et al. 6,868,389 B1 3/2005 Wilkins et al. 6,915,289 B1 7/2005 Malloy et al. 6,917,940 B1 7/2005 Chen et al. 6,959,305 B2 10/2005 Bird et al. 2001/0014868 A1 8/2001 Herz et al. 2002/0026356 A1 2/2002 Bergh et al. 2002/0046116 A1 4/2002 Hohle et al. 2002/0169654 A1* 11/2002 Santos et al. 705/10
(75) Inventors: Andre B. Black , Medford, MA (US); David F. Cheung , Potomac, MD (US); Ruby Kennedy , Bedford, MA (US); Yuchun Lee , Sudbury, MA (US); Patrick Martin , Lexington, MA (US)	
(73) Assignee: International Business Machines Corporation , Armonk, NY (US)	
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1069 days.	
(21) Appl. No.: 11/492,010	
(22) Filed: Jul. 24, 2006	
(65) Prior Publication Data US 2008/0033808 A1 Feb. 7, 2008	

(Continued)

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U.S. Patent 8,315,904 (Black) – Claim 1

1. A computer implemented method comprising producing, by one or more computers, a promotion list for a promotion management campaign by:

- **(a) generating, by one or more computers, a promotion instance from a promotion template;**
- **(b) receiving, by one or more computers executing marketing campaign software, a search query that includes one or more attributes of a promotion instance;**
- **(c) searching one or more data repositories for promotion instances having attributes corresponding to the attributes specified in the search query;**
- **(d) returning a list including one or more promotion instances having the attributes corresponding to the attributes specified in the search query;**
- **(e) receiving, by the one or more computers, a selection of one or more promotion instances, from the returned list, to be included in the promotion list;**
- **(f) assigning the selected promotion instances to the promotions list; and**
- **(g) storing the promotion list in an electronic medium.**

1. A computer implemented method comprising producing, by one or more computers, a promotion list for a promotion management campaign by:

```
<ul class="photo-cards">

</><article data-unmappable="false" data-zillowOwned="" data-grouped="true"
data-latitude="47988104" data-longitude="-122317671" data-pgapt="NoEstimate"
data-zpid="1001473234" data-photoCount="9" id="spid_1001473234" class=
"sag-photo-card photo-card sag-aspect-ratio sag-photo-card-building type-not-favorite" data-sgapt=
"Unknown Listed By"><div class=
"sag-photo-card-content sag-aspect-ratio-content"
itemscope="" itemtype="http://schema.org/SingleFamilyResidence"><div class=
"sag-photo-card-caption"><h4 class=
"sag-photo-card-address"><span class=
"sag-icon-for-rent"></span><Beacon View
</span></h4><p class=
"sag-photo-card-status"></p><span class=
"sag-photo-card-info"></span></div><div class=
"sag-photo-unit"><strong>1</strong></div><div class=
"sag-icon-beds"></div></div><div class=
"$1,497+</span></div><div class=
"sag-photo-card-price"></div><div class=
"sag-photo-card-address">1701 12th Ave S, Seattle, WA</span></div><a href=
"/beacon-view-seattle-wa-5XJNlh/" class=
"sag-photo-card-overlay-link routable
hdp-link"></a><div class=
"sag-photo-card-count"><ul class=
"sag-list_inline
sag-photo-card-badge"><li class=
"photo-count">9 photos</li></ul></div><div class=
https://photos.zillowstatic.com/p/e/iSaplvfsoatq000000000.jpg"></div></div><div class=
"sag-photo-card-actions">hide hh-hide ""</div></div></div></li></ul>

template hide"

</--<"bed":1,"miniBubbleType":2,"image":"https://photos.zillowstatic.com/v_p/a/IIIS
aplivoecull,q0000000000.jpg","matchingPropertyCount":5,"minPrice":1497,"sgfx":650,"maxPri
ce":null,"dara$age":11,"title":"Beacon
View","bath":1.0,"priceRange":{"$1,497+/wgs","flexData":{"null}}-></div></article></li>

</li>

</li><article data-unmappable="false" data-zillowOwned="" data-grouped="true"
data-latitude="47567029" data-longitude="-122364934" data-pgapt="NoEstimate"
data-zpid="1002096422" data-photoCount="14" id="spid_1002096422" class=
"sag-photo-card photo-card sag-aspect-ratio sag-photo-card-building type-not-favorite"
data-sgapt="Unknown Listed By"><div class=
"sag-photo-card-content"
itemscope="" itemtype="
http://schema.org/SingleFamilyResidence"><div class=
"sag-photo-card-caption"><h4 class=
"sag-photo-card-address"><span class=
"sag-photo-card-status"></span><span class=
"sag-icon-for-rent"></span><span>Youngstown Flats</span></h4><p class=
"sag-photo-card-saga"></span><span class=
"sag-photo-card-info"></span></div><div class=
"sag-photo-card-unit"><strong>0</strong></div><div class=
"sag-icon-beds"></div></div><div class=
"$1,699+</span></div><div class=
"sag-photo-card-price"></div><div class=
"sag-photo-card-address">4040 26th Ave SW, Seattle, WA</span></div><a href=
"/youngstown-flats-seattle-wa-5XGHPH/" class=
"sag-photo-card-overlay-link routable
hdp-link"></a><div class=
"sag-photo-card-count"><ul class=
"sag-list_inline
photo-card-badge"><li class=
"sag-photo-card-img"></div><div class=
https://photos.zillowstatic.com/p/e/iFus4shabilyj3r000000000.jpg"></div></div><div class=
"data:image/gif;base64,R0lODCIDHQABATAAAAAAIP//YHSBAEAAAAAAAAAAAAAAAAEAABAABRAAA"
"></img></div><div class=
"sag-photo-card-actions">hide hh-hide ""</div></div></div></li>

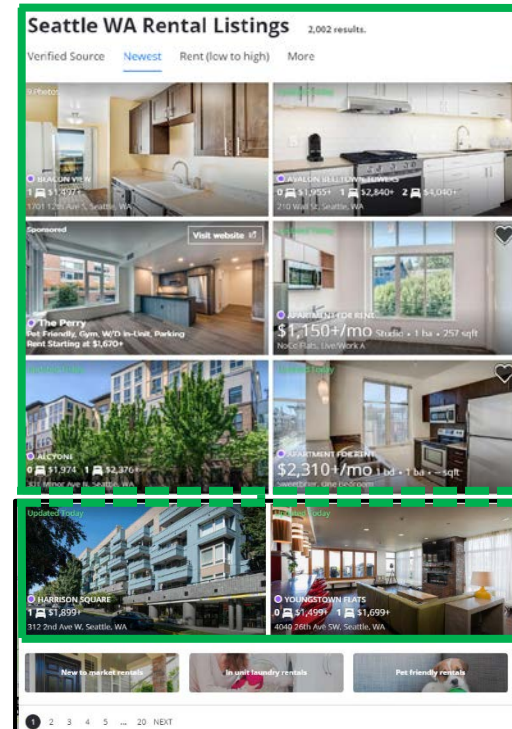
template hide"

</--<"bed":0,"miniBubbleType":2,"image":"https://photos.zillowstatic.com/v_p/a/IIIS
u4szabilyj3r0000000000.jpg","matchingPropertyCount":16,"minPrice":1499,"sgfx":592,"maxPri
ce":null,"dara$age":11,"title":"Youngstown
Flats","bath":null,"priceRange":{"$1,499+/wgs","flexData":{"null}}-></div></article></li>

</ul>
```



Displayed Rental Listings in HTML, Zillow, <https://www.zillow.com>.



Displayed Rental Listings for
Seattle, Zillow,
<https://www.zillow.com>.

U.S. Patent 8,315,904 (Black) – Claim 1

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(a) generating, by one or more computers, a promotion instance from a promotion template;

```
<li><article data-unmappable="false" data-zillowOwned=""
  data-grouped="true" data-latitude="47588104"
  data-longitude="-122317671" data-pgapt="NoZestimate"
  data-zpid="1001472324" data-photoCount="9" id=
  "zpid_1001472324" class="zgg-photo-card photo-card
  zgg-aspect-ratio zgg-photo-card_building
  type-not-favorite" data-sgapt="Unknown Listed By"><div
  class="zgg-photo-card-content zgg-aspect-ratio-content"
  itemscope="" itemType="
  http://schema.org/SingleFamilyResidence"><div class=
  "zgg-photo-card-caption"><h4 class="zgg-photo-card-spec"
  ><span class="zgg-photo-card-status"><span class=
  "zgg-icon-for-rent"></span> Beacon View </span></h4><p
  class="zgg-photo-card-spec"><span class=
  "zgg-photo-card-info"><span class="zgg-photo-card-unit"
  ><strong>1</strong><span class="zgg-icon-beds"></span>
  $1,497+ </span></p><p class="zgg-photo-card-spec"
  ><span class="zgg-photo-card-address">1701 12th Ave
  S, Seattle, WA </span></p></div><a href=
  "/b/beacon-view-seattle-wa-5XjNLM/" class=
  "zgg-photo-card-overlay-link routable bdp-link"></a><div
  class="zgg-photo-card-img"><ul class="zgg-list-img
  zgg-photo-card-badge"><li class="photo-count">9 photos
  </li></ul></img></div><div class="zgg-photo-card-actions
  ls-hide lh-hide "></div></div><div class="minibubble
  template hide">
  <!--{"bed":1,"miniBubbleType":2,"image":"https://photos.
  zillowstatic.com/p_a/ISapliv6ooatg0000000000.jpg",
  "matchingPropertyCount":5,"minPrice":1497,"sqft":650,"ma
  xPrice":null,"datasize":11,"title":"Beacon
  View","bath":1.0,"priceRange":"$1,497+","flexData":r
  ull}</div></article></li>
```

Note: Zillow generates property listings (such as “Beacon View” shown below).



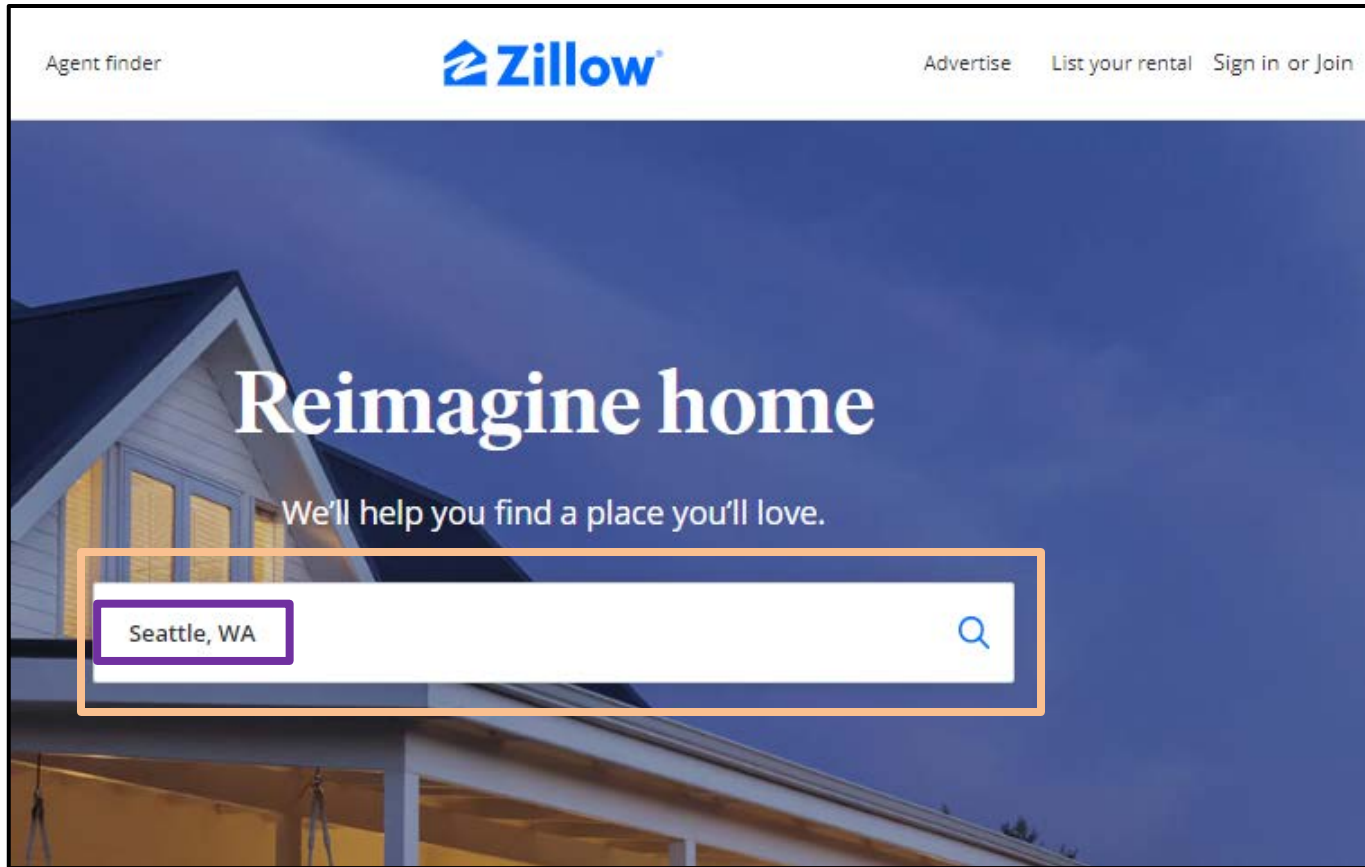
“Beacon View” Property Listing, Zillow, <https://www.zillow.com>.

Portion of the HTML for “Beacon View,”
Zillow, <https://www.zillow.com>.

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(b) receiving, by one or more computers executing marketing campaign software, a search query that includes one or more attributes of a promotion instance;



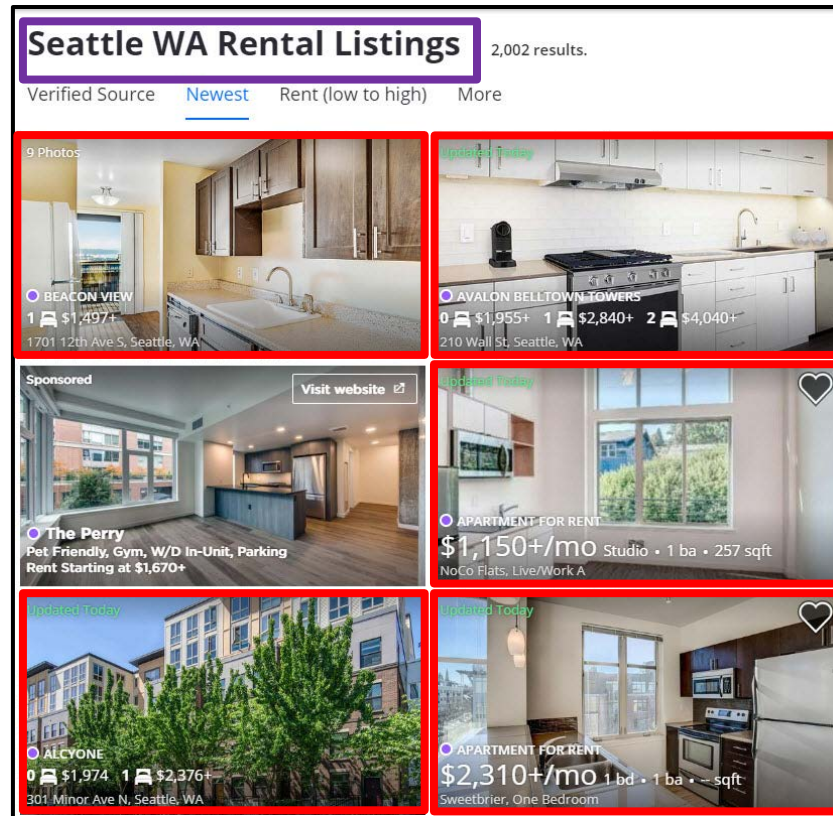
Zillow, <https://www.zillow.com>.

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(c) searching one or more data repositories for promotion instances having attributes corresponding to the attributes specified in the search query;

“Zillow is the leading real estate and rental marketplace dedicated to empowering consumers with data, inspiration and knowledge around the place they call home, and connecting them with the best local professionals who can help. Zillow serves the full lifecycle of owning and living in a home: buying, selling, renting, financing, remodeling and more. It starts with Zillow's living database of more than 110 million U.S. homes. . . .”
<https://www.zillow.com/corp/About.htm>.



Rental Listings for Seattle, Zillow,
<https://www.zillow.com>.

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(d) returning a list including one or more **promotion instances** having the attributes corresponding to the attributes specified in the search query;

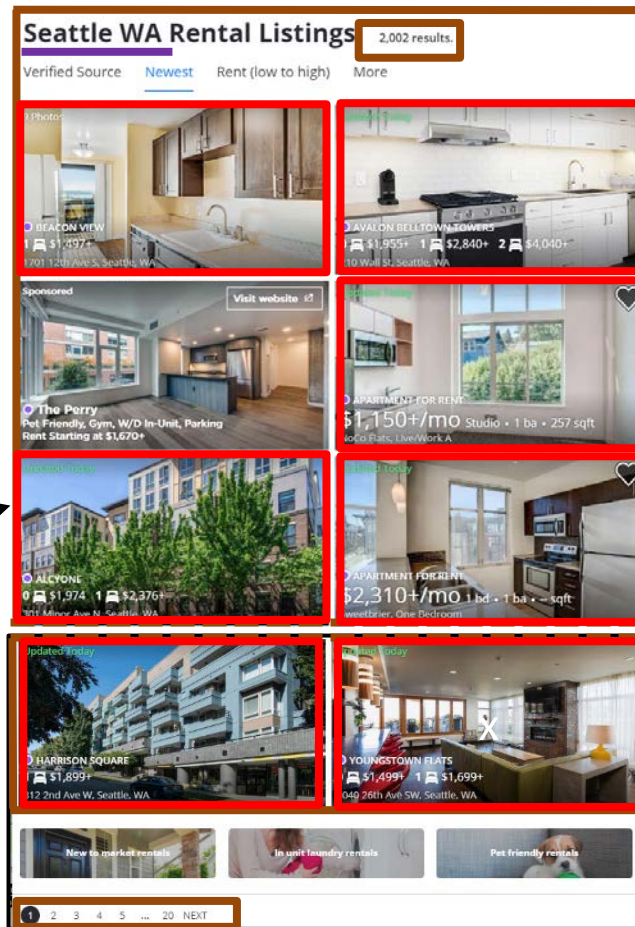
Request on 2019-04-13T14:01:10.174Z

General:

Request URL: https://www.zillow.com/homes/seattle-wa_rb/
HTTP Version: http/2.0
Request method: GET
Remote Address: 99.84.41.128

```
"binCounts":{"totalResultCount":2002,"forSaleCount":0,"makeMeMo  
veCount":98,"recentlySoldCount":37873,"forRentCount":7313,"fsba  
Count":2257,"fsboCount":24,"foreclosuresCount":1,"bankOwnedCount":7,"foreclosedCount":10,"preForeclosureCount":119,"newConstru  
ctionCount":504,"openHousesCount":0,"singleFamilyCount":299,"co  
ndoCount":6313,"multiFamilyCount":573,"manufacturedCount":0,"la  
ndCount":0,"unmappedCount":0,"comingSoonCount":11  
  
,"pageNumber":1,"disambig":"","mapStateMessage":"","  
"error":{},"regionSelectionObject":{"regionId":16037,  
"selectionName":"Seattle","regionURLString":"Seattle WA",  
"regionType":6,"boundingRect":{"sw":{"lat":47491912,  
"lon":-122465159},"ne":{"lat":47734145,"lon":  
-122224432}}}
```

HTML section showing total number of rental listings in Seattle, WA, Zillow, <https://www.zillow.com>.



Note: Zillow returns a set of property listings from its data repository that have attributes that correspond to the search query attributes (such as “Seattle, WA”).

Rental Listings for Seattle, WA, Zillow, <https://www.zillow.com>.

(e) receiving, by the one or more computers, a selection of one or more promotion instances, from the returned list, to be included in the promotion list;

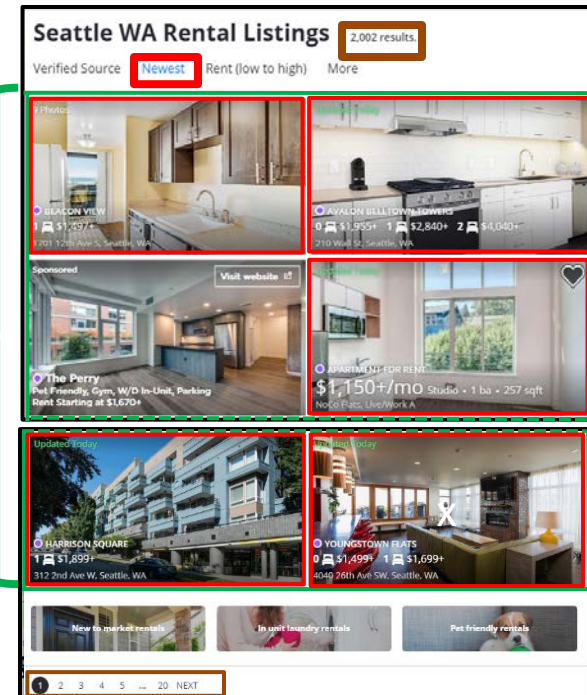
Note: Zillow receives a selection of the total number of property listings that match the search query to be included on the initial search results list based on which of the properties are newest.

```
"binCounts":{"totalResultCount":2002
,"forSaleCount":0,"makeMeMoveCount":
98,"recentlySoldCount":37873,"forRen
tCount":7313,"fsbaCount":2257,"fsboC
ount":24,"foreclosuresCount":1,"bank
OwnedCount":7,"foreclosedCount":10,"
preForeclosureCount":115,"newConstru
ctionCount":504,"openHousesCount":0,
"singleFamilyCount":295,"condoCount
":6313,"multiFamilyCount":573,"manufa
cturedCount":0,"landCount":0,"unmappe
dCount":0,"comingSoonCount":1}
```

HTML section showing
total number of rental
listings in Seattle, WA,
Zillow,
<https://www.zillow.com>.

Displayed Rental
Listings in HTML,
Zillow,
<https://www.zillow.com>

```
<ul class="photo-cards">
<li><article data-unmappable="false" data-zillowOwned="" data-grouped="true"
data-latitude="47588104" data-longitude="-122317671" data-pgapt="NoEstimate"
data-zpid="1001472324" data-photoCount="9" id="spid_1001472324" class="zgg-photo-card
photo-card zgg-aspect-ratio zgg-photo-card-building type-not-favorite" data-sgapt=
"Unknown Listed By"><div class="zgg-photo-card-content zgg-aspect-ratio-content"
itemscope="" itemType="http://schema.org/SingleFamilyResidence"><div class=
"zgg-photo-card-caption"><h4 class="zgg-photo-card-zgg"><span class=
"zgg-photo-card-status"><span class="zgg-photo-card-info"><span
class="zgg-photo-card-unit"><strong>1</strong><span class="zgg-photo-card-bed"></span>
$1,497+</span></span></p><p class="zgg-photo-card-zgg"><span class=
"zgg-photo-card-address">1701 12th Ave S, Seattle, WA</span></p><div><a href=
"/b/beacon-view-Seattle-WA-5XjNlh/" class="zgg-photo-card-overlay-link xutable
hdp-link"></a><div class="zgg-photo-card-img"><ul class="zgg-list-inline
zgg-photo-card-badge"><li class="photo-count">9 photos</li></ul><img src=
"https://photos.zillowstatic.com/p_e/ISap1y6o0atg0000000000.jpg"></img></div><div
class="zgg-photo-card-actions ls-hide lh-hide"></div></div><div class="minibubble
template hide">
<!--["bed":1,"miniBubbleType":2,"image":"https://photos.zillowstatic.com/p_e/IS
ap1y6o0atg0000000000.jpg","matchingPropertyCount":5,"minPrice":1497,"sgft":650,"maxPr
ice":null,"datasize":11,"title":"Beacon
View","bath":1.0,"priceRange":"$1,497+\\mo","flexData":null]--></div></article></li>
<li><article data-unmappable="false" data-zillowOwned="" data-grouped="true"
data-latitude="47567029" data-longitude="-122364934" data-pgapt="NoEstimate"
data-zpid="1002096422" data-photoCount="14" id="spid_1002096422" class="zgg-photo-card
photo-card zgg-aspect-ratio zgg-photo-card-building type-not-favorite"
data-sgapt="Unknown Listed By"><div class="zgg-photo-card-content
zgg-aspect-ratio-content" itemscope="" itemType="
http://schema.org/SingleFamilyResidence"><div class="zgg-photo-card-caption"><h4 class=
"zgg-photo-card-zgg"><span class="zgg-photo-card-status"><span class=
"zgg-photo-card-info"><span class="zgg-photo-card-unit"><strong>0</strong><span class="zgg-photo-card-bed"></span>
$1,499+</span></span></p><p class="zgg-photo-card-zgg"><span class=
"zgg-photo-card-address">4040 26th Ave SW, Seattle, WA</span></p><div><a href=
"/b/youngstown-flats-Seattle-WA-5XqgHP/" class="zgg-photo-card-overlay-link xutable
hdp-link"></a><div class="zgg-photo-card-img"><ul class="zgg-list-inline
zgg-photo-card-badge"><li class="zgg-fresh">Updated today</li></ul><img data-src=
"https://photos.zillowstatic.com/p_e/ISu4zhblyj3s0000000000.jpg" src=
"data:image/gif;base64,R01OD1hAQABAIAAAQAA//yH5BAEAAALAAAAAABAAQABAA7BRAA"
"></img></div><div class="zgg-photo-card-actions ls-hide lh-hide"></div></div><div
class="minibubble template hide">
<!--["bed":0,"miniBubbleType":2,"image":"https://photos.zillowstatic.com/p_e/IS
u4zhblyj3s0000000000.jpg","matchingPropertyCount":16,"minPrice":1499,"sgft":592,"maxPr
ice":null,"datasize":11,"title":"Youngstown
Flats","bath":null,"priceRange":"$1,499+\\mo","flexData":null]--></div></article></li>
</ul>
```



Displayed Rental Listings
for Seattle, Zillow,
<https://www.zillow.com>.

(f) assigning the selected promotion instances to the promotions list; and

Note: Zillow assigns property listings to the initial search results list by listing them in the HTML file that is sent to the user's browser for display.

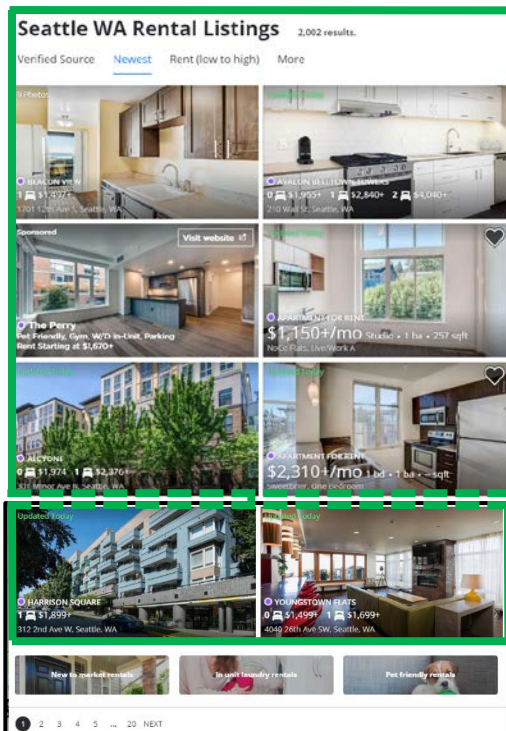
[illegible]

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(g) storing the promotion list in an electronic medium.

Note: Zillow stores the promotion list in an HTML file containing the property listings that match the search query attributes at the user's browser for display.



Rental Listings for Seattle,
Zillow,
<https://www.zillow.com>.

Request on 2019-04-13T14:01:10.174Z

General:

Request URL: https://www.zillow.com/homes/seattle-wa_rb/

HTTP Version: http/2.0

Request method: GET

Remote Address: 99.84.41.128

Server's response

Full response:

200 OK http/2.0 More info about HTTP status codes in [Wikipedia](https://en.wikipedia.org/wiki/List_of_HTTP_status_codes).

Headers:

- **cache-control** no-cache
- **content-encoding** gzip
- **content-security-policy** frame-ancestors zillow.highspot.com view.highspot.com;
- **content-type** text/html; charset=UTF-8
- **date** Sat, 13 Apr 2019 14:01:10 GMT
- **expires** Thu, 01 Jan 1970 00:00:00 GMT
- **server** Apache-Coyote/1.1